

The Pacific Northwest Water Quality Data Exchange

*Oregon Department of Environmental Quality
Washington Department of Ecology
Idaho Department of Environmental Quality
Alaska Department of Environmental Conservation
Environmental Protection Agency, Region X*

Presentation to National Water
Quality Monitoring Conference
May 18th, 2004

Pacific Northwest
Water Quality Data Exchange

Challenge Grant Objectives

- Provide access to a comprehensive collection of Water Quality data for the Pacific Northwest
- Apply Network principles
- Enable participation from a wide range of data sources
- Design data exchange flow to support partner needs and eventual upload to EPA STORET

Collaboration is Key to Success

Active Participants

- Environmental Protection Agency Region 10
- Nestucca-Neskowin Watersheds Council (Oregon)
- Northwest Indian Fisheries Commission
- State of Alaska Department of Environmental Conservation
- State of Idaho Department of Environmental Quality
- State of Idaho Soil Conservation Commission
- State of Oregon Department of Environmental Quality
- State of Washington Department of Ecology
- University of Idaho - Water Resources Research Institute
- Windsor Solutions, Inc.

Collaboration is Key to Success

Affiliates

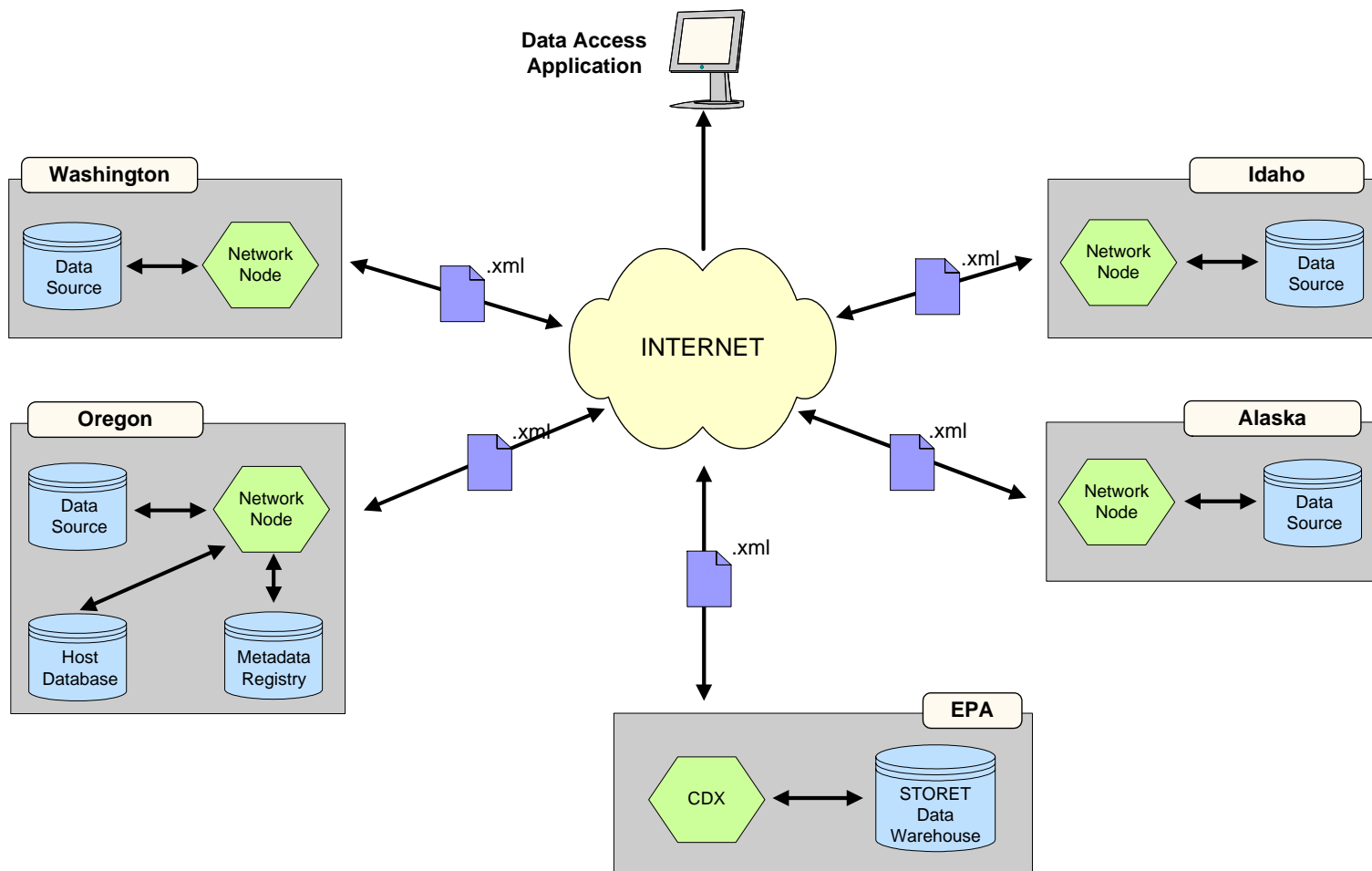
- Coeur d'Alene Tribe
- Confederated Tribes of the Siletz Indians
- Idaho National Engineering and Environmental Laboratories
- King County (Washington) Department of Natural Resources
- Long Tom Watershed Council (Oregon)
- National Park Service
- Nez Perce Tribe
- Pacific States Marine Fisheries Commission – StreamNet
- Rogue Valley Council of Governments (Oregon)
- South Coast Watersheds Council (Oregon)
- State of Oregon Watershed Enhancement Board
- Surfrider Foundation
- Tanana Chiefs Council

Collaboration is Key to Success

Related, Collaborative Project Contacts

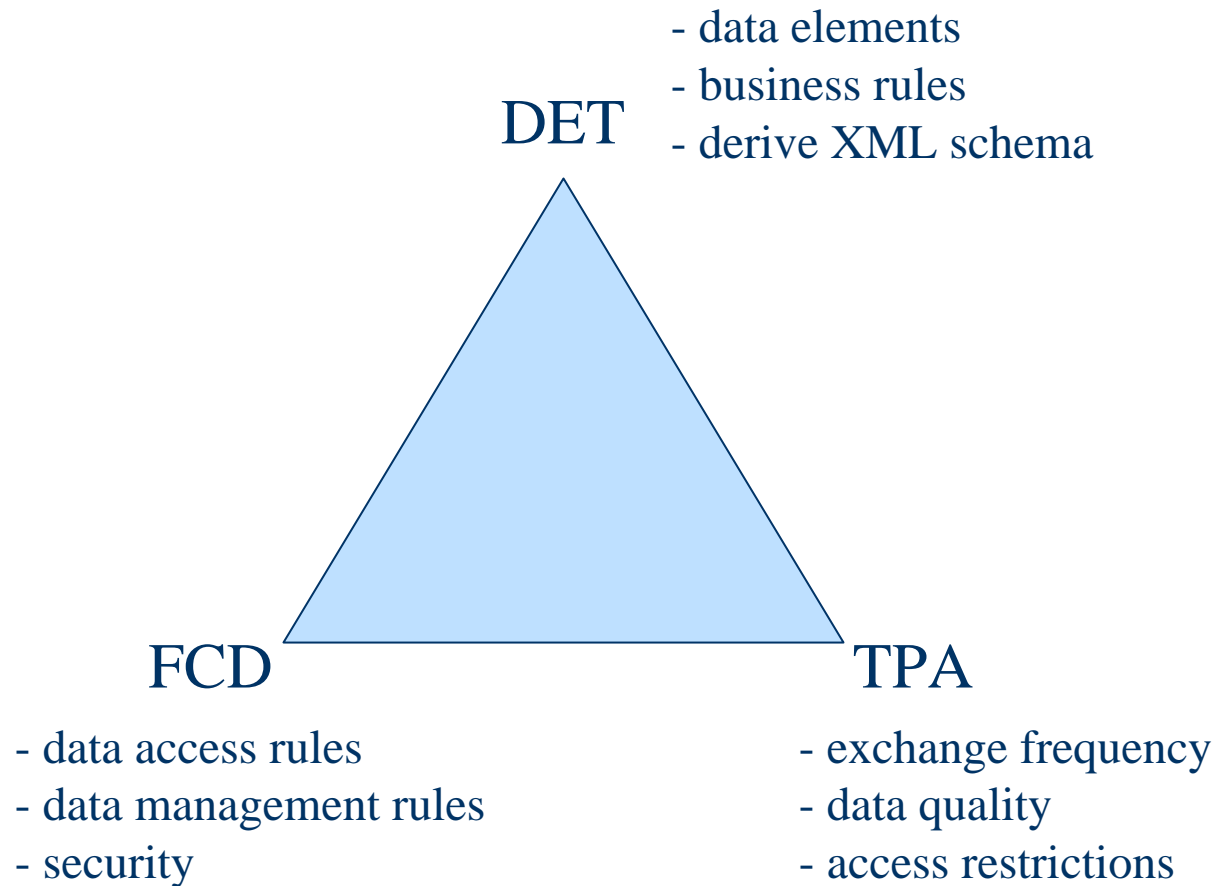
- Environmental Data Standards Council – Environmental Sampling, Analysis, and Results Standard
- Environmental Protection Agency – OEI / CDX
- Environmental Protection Agency – OWOW / STORET
- National Water Quality Monitoring Council – Water Quality Data Elements
- USGS -NWIS / EPA –STORET Data Integration

Vision for the Exchange Data Flow




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Components of the Exchange Flow



Data Access Query Screen



Pacific Northwest Water Quality Exchange

Demonstration Version

Projects

Data Source: ☐ Idaho (Ready) ☐ Oregon (Ready) ☐ Washington (Ready)

Data Provider: contains

Project Name: contains

Project Organization: contains

Project Date Range: After: Before:

Locations

Responsible Organization: contains

Station Name: contains

Station Type:
Groundwater
Intertidal

Station Location:

Latitude: to

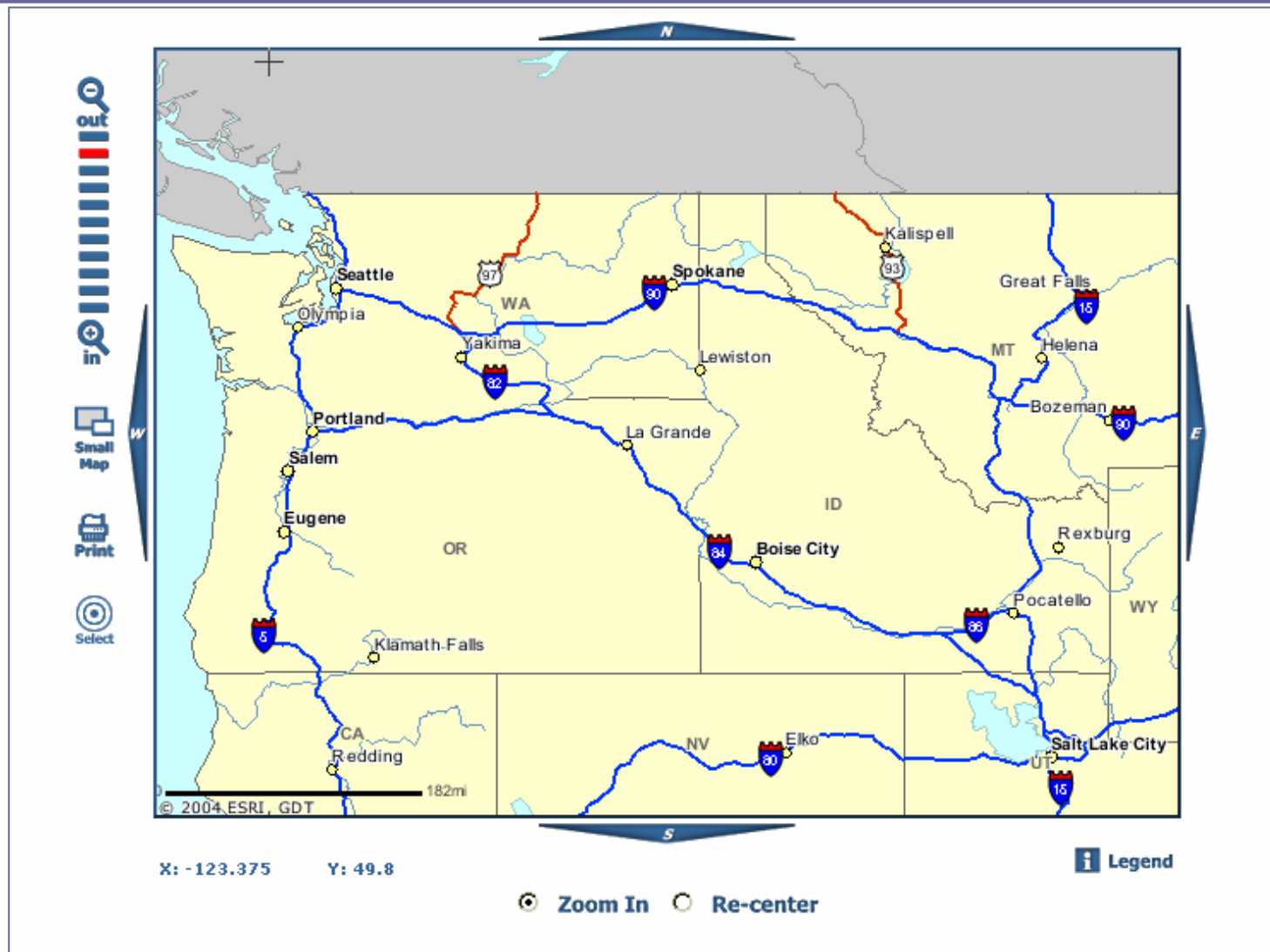
Longitude: to

Location Context:

Location Description:

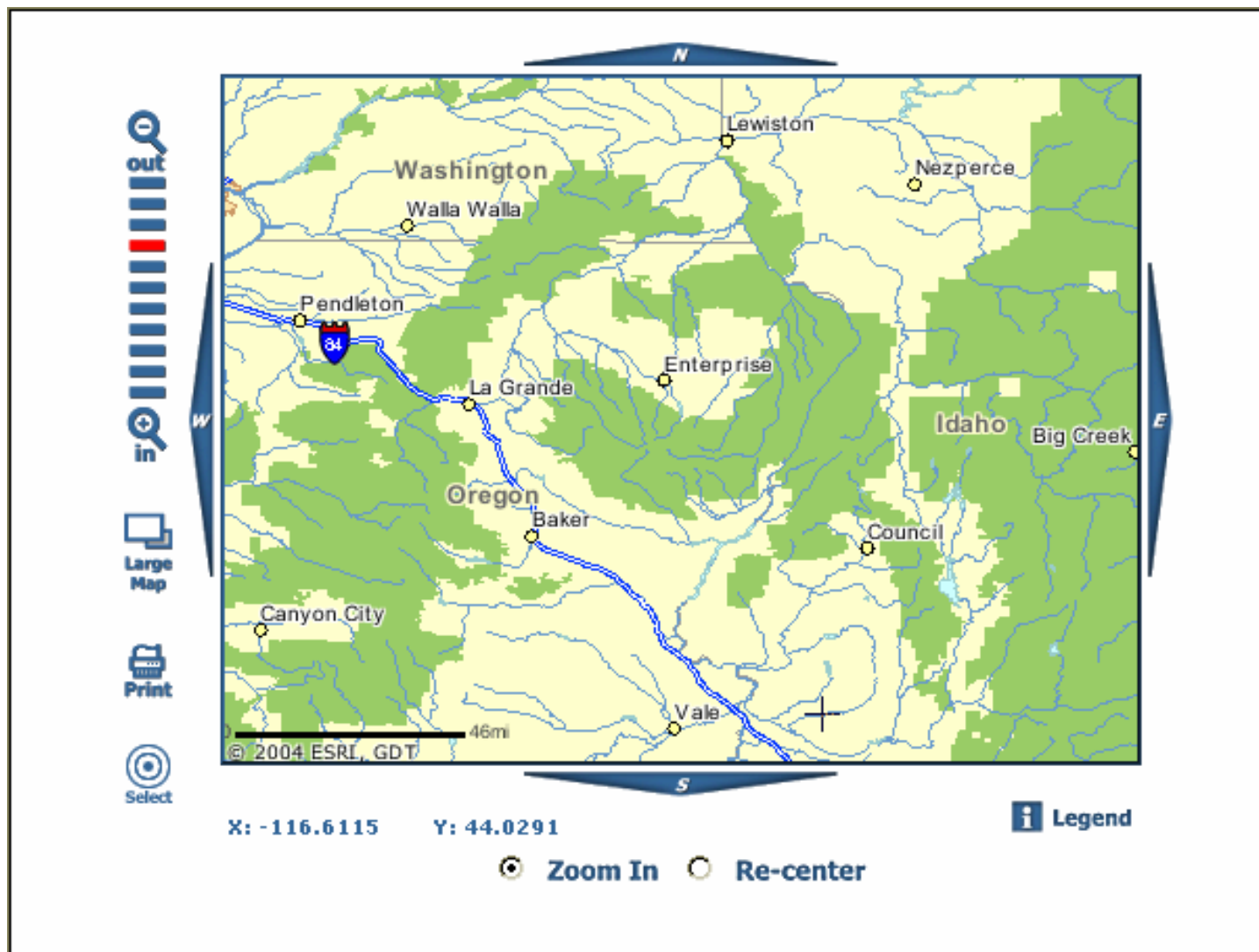
Pacific Northwest
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Initial GIS Select Screen



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Water Quality Data Exchange

Tri-state area



Data Access Query Screen

Project Name: After: Before:

Locations

Responsible Organization: contains

Station Name: contains

Station Type:
Groundwater
Intertidal

Station Location:

Latitude: to

Longitude: to

Location Context:

Location Description:

Results

Sampling Organization: contains

Sampling Date Range: After:
Before:

Taxon Name:
Micropterus salmoides
Micropterus dolomieu

Media Name:
Biological (tissue)
Sediment

Analyte Name:
1,1,1-Trichloroethane
1,1,2,2-Tetrachloroethane

Results/Page:

Project Summary List

Pacific Northwest Water Quality Exchange

Demonstration Version

Data Sources

Organization ID	Name	Contact	Telephone Number
Idaho-DEQ	State of Idaho, Department of Environmental Quality 1410 North Hilton, Boise, Idaho 83706	Jake Duplessie	208-373-0161
OregonDEQ	Oregon Department of Environmental Quality 811 SW 6th Ave, Portland, OR 97204	Curtis Cude	503-229-6086
WADOE	Washington State Department of Ecology P.O. Box 47600, Olympia, WA 98504-7600	Chris Neumiller / EIM Data Coordinator	360-407-6258

Projects (5)

Locations (215)

Results (900)

Refine Search | New Search

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Provider	Identifier	Project Organization	Project Name	Start Date	End Date
WADOE	3094010		1989 BWMP FISH TISSUE AND SEDIMENT	5/2/1989	10/17/1989
OregonDEQ	131		Astoria Landfill	1/12/2000	2/28/2001
WADOE	6515650		Central Columbia Basin GWMA - Nitrate Characterization Study	9/21/1998	11/30/1998
WADOE	380770		Effectiveness Monitoring on Alpowa, Deadman, & Pataha creeks	4/23/2002	12/17/2002
Idaho-DEQ	SDWIS/Idaho		Safe Drinking Water Information System- For Idaho	1/1/1993	1/1/0001

46.897727272727
-114.920454545454
43.693181818182
110.102101010102

Pacific Northwest
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Project Detail

Pacific Northwest Water Quality Exchange

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Project Details

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Data Source: Washington State Department of Ecology

Name: Central Columbia Basin GWMA - Nitrate Characterization Study

Identifier: 6515650

Description: The purpose of the study is to characterize the baseline concentration and three-dimensional distribution of nitrate in groundwater in the Central Columbia Basin Grant Adams and Franklin counties

Study Area Description: Central Columbia Basin Groundwater Management Area (GWMA) - includes all of Grant, Adams, and Franklin Counties

Start Date: 9/21/1998

End Date: 11/30/1998

Contact: Charles Pitz
Washington State Department of Ecology
State or Provincial
P.O. Box 47600, Olympia, WA 98504-7600
(360)407-6775
chpi461@ecy.wa.gov

Location Summary List

Pacific Northwest Water Quality Exchange

Demonstration Version

Data Sources

Organization ID	Name	Contact	Telephone Number
Idaho-DEQ	State of Idaho, Department of Environmental Quality 1410 North Hilton, Boise, Idaho 83706	Jake Duplessie	208-373-0161
OregonDEQ	Oregon Department of Environmental Quality 811 SW 6th Ave, Portland, OR 97204	Curtis Cude	503-229-6086
WADOE	Washington State Department of Ecology P.O. Box 47600, Olympia, WA 98504-7600	Chris Neumiller / EIM Data Coordinator	360-407-6258











Projects (4)

Locations (12)

Results (900)

Refine Search | New Search

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Provider	Station Identifier	Station Name	Station Type	Map	Well
OregonDEQ	10410	Wallowa River at Minam	StreamorRiver		
OregonDEQ	11457	Minam River at Minam	StreamorRiver		
OregonDEQ	13000	Wallowa River @ Wallowa STP Outfall	StreamorRiver		
OregonDEQ	13004	Wallowa River @ Enterprise STP Outfall	StreamorRiver		
OregonDEQ	13008	Trout Creek @ Mouth	StreamorRiver		
WADOE	4154911	ALPOWA CREEK 4	StreamorRiver		
WADOE	6482911	NORTH DEADMAN CREEK	StreamorRiver		
WADOE	8093911	PATAHA CREEK 2	StreamorRiver		
WADOE	8152911	LOWER DEADMAN CREEK	StreamorRiver		
WADOE	8534911	ALPOWA CREEK 2	StreamorRiver		
Idaho-DEQ	ID10425	COTTONWOOD WATER DEPT	Groundwater		
Idaho-DEQ	ID4989	GENESEE CITY OF	Other		

0
300

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Location Detail

Location Details		Back
Data Source:	Washington State Department of Ecology	
Identifier:	4070461	
Name:	461512118532401	
Description:	East Franklin	
Station Type:	Groundwater	
Location Details:	Latitude:	46.285410
	Longitude:	-118.891110
	Horizontal Accuracy:	0
	Map Scale:	99
	Coordinate Data Source:	WADOE
	Horizontal Collect. Method:	UNKNOWN
	Horizontal Ref. Datum:	NAD83
Elevation Details:	Vertical Measure:	742 FEET
	Vertical Accuracy:	0
	Vertical Collect. Method:	GPSCARRIERPHASESTATICRELATIVEPOSITION
	Vertical Ref. Datum:	NAD88
	Vertical Ref. Context:	
Well Details:	Well ID:	4070461
	Context:	Ecology Internal System ID
	Use:	Withdrawal of Water
	Status:	Active
	Diameter:	0 IN
	Completion Depth:	0
	Depth to Top of Open Interval:	0
	Depth to Bottom of Open Interval:	0
	Open Interval Type:	
Contact:		

Result Summary List

Data Sources

Organization ID	Name	Contact	Telephone Number
Idaho-DEQ	State of Idaho, Department of Environmental Quality 1410 North Hilton, Boise, Idaho 83706	Jake Duplessie	208-373-0161
OregonDEQ	Oregon Department of Environmental Quality 811 SW 6th Ave, Portland, OR 97204	Curtis Cude	503-229-6086
WADOE	Washington State Department of Ecology P.O. Box 47600, Olympia, WA 98504-7600	Chris Neumiller / EIM Data Coordinator	360-407-6258

[Projects \(5\)](#)
[Locations \(215\)](#)
[Results \(900\)](#)
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Provider	Project ID	Station ID	Start Date	Matrix	Method	QA Code	Analyte	Result Value	Qual
WADOE	6515650	2070461	10/7/1998		88	A	Nitrite-Nitrate	0.01 mg/L	*
WADOE	6515650	6021461	10/7/1998		88	E	Nitrite-Nitrate	4.05 mg/L	
WADOE	6515650	4170461	10/7/1998		88	E	Nitrite-Nitrate	0.26 mg/L	
Idaho-DEQ	SDWIS/Idaho ID10294		10/7/2003			E	RADIUM-228	0 PIC/L	*
Idaho-DEQ	SDWIS/Idaho ID10214		10/7/2003			E	RADIUM-228	0	*
WADOE	6515650	3560461	10/8/1998		88	E	Nitrite-Nitrate	0.334 mg/L	
WADOE	6515650	4070461	10/8/1998		88	E	Nitrite-Nitrate	5.81 mg/L	
WADOE	6515650	1560461	10/8/1998		88	E	Nitrite-Nitrate	12.4 mg/L	
WADOE	6515650	460461	10/8/1998		88	E	Nitrite-Nitrate	13.9 mg/L	
WADOE	380770	8534911	10/8/2002		323	E	Fecal Coliform	284 #col/100ml	
WADOE	380770	8534911	10/8/2002		21453	E	Temperature, water	12 deg C	*
WADOE	6515650	9121461	11/10/1998		88	E	Nitrite-Nitrate	12.1 mg/L	
WADOE	6515650	9431461	11/12/1998		88	E	Nitrite-Nitrate	0.327 mg/L	
WADOE	6515650	5431461	11/12/1998		88	A	Nitrite-Nitrate	0.01 mg/L	*
WADOE	6515650	1431461	11/13/1998		88	E	Nitrite-Nitrate	0.317 mg/L	
WADOE	6515650	2531461	11/13/1998		88	E	Nitrite-Nitrate	0.248 mg/L	
OregonDEQ	131	14242	11/14/2000			A	Alkalinity	81 mg/L	*
OregonDEQ	131	14242	11/14/2000			A	Ammonia	0.03 mg/L	*
OregonDEQ	131	14242	11/14/2000			A	Calcium	15.6 mg/L	*
OregonDEQ	131	14242	11/14/2000			A	Chemical Oxygen Demand	5 mg/L	*
OregonDEQ	131	14242	11/14/2000			A	Dissolved Aluminum	0.022 mg/L	*
OregonDEQ	131	14242	11/14/2000			A	Dissolved Antimony	0.0030 mg/L	*
OregonDEQ	131	14242	11/14/2000			A	Dissolved Arsenic	0.0114 mg/L	*
OregonDEQ	131	14242	11/14/2000			A	Dissolved Barium	0.0583 mg/L	*
OregonDEQ	131	14242	11/14/2000			A	Dissolved Beryllium	0.000173 mg/L	*
OregonDEQ	131	14242	11/14/2000			A	Dissolved Boron	0.0244 mg/L	*
OregonDEQ	131	14242	11/14/2000			A	Dissolved Cadmium	0.00026 mg/L	*
OregonDEQ	131	14242	11/14/2000			A	Dissolved Calcium	15.6 mg/L	*
OregonDEQ	131	14242	11/14/2000			A	Dissolved Chloride	14 mg/L	*
OregonDEQ	131	14242	11/14/2000			A	Dissolved Chromium	0.00663 mg/L	*
OregonDEQ	131	14242	11/14/2000			A	Dissolved Cobalt	0.00020 mg/L	*

Result Detail

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Result Details		Back
Data Source:	Washington State Department of Ecology	
Analyte:	Nitrate	
Value:	5.8 mg/L	
Significant Digits:		
Qualifier:		
Taxon:	-	
Quality Assessment:	E	
Status:		
Availability:		
Analytical Method:	Nitrogen, (Nitrate-Nitrite), Colorimetric, Automated Cadmium Reducti	
Detection Level:		
QAQC Exception Indicator:		
QAQC Exception Comment:		
Contact:	Dave Hallock Washington State Department of Ecology State or Provincial P.O. Box 47600, Olympia, WA 98504-7600 (360)407-6681 daha461@ecy.wa.gov	

Next Steps

- Enhance data access application
 - Underway
 - Download capability
 - Project and Project/Station queries
 - Data Catalog
- Enhance data acquisition capability
 - Q3 2004
 - Pilot mapped database for watershed councils
- Rollout to additional Exchange partners
 - Q3-Q4 2004

Thank you!

Contact Curtis Cude for details

Cude.curtis@deq.state.or.us

503-229-6086